

ABSTRACT OF THE DISCLOSURE

Disclosed are a semiconductor device which hardly experiences a reduction in mobility caused by scattering by
5 the fixed charge existent in a gate insulating film while the EOT of a fine CMOS comprising the high-dielectric gate insulating film is reduced and which enables high integration, and a production process therefor. CMOS having no junction is formed on an SOI substrate and a
10 high-dielectric gate insulating film is used as the gate insulating film of the CMOS. The feature of the CMOS device of the present invention is that the CMOS device is operated in an accumulation mode. Since a channel is formed several nm away from the surface of the substrate as compared with
15 an ordinary device which operates in an inversion mode, a reduction in mobility caused by the fixed charge existent in the gate insulating film can be reduced.